

TESTIMONY OF PETER GLASER AND JOHN CLINE
ON EPA'S APPROACH TO ADDRESSING GREENHOUSE GASES IN THE WAKE OF
THE SUPREME COURT'S DECISION IN *MASSACHUSETTS V. EPA*

HOUSE COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
November 8, 2007

INTRODUCTION

We are Peter Glaser and John Cline, partners in the law firm of Troutman Sanders LLP. We each have an active Clean Air Act (CAA) practice and have been involved in greenhouse gas (GHG) legal issues for more than a decade. We represented the Washington Legal Foundation in filing an amicus brief before the Supreme Court in the *Massachusetts v. EPA* litigation.

We are not here before the Committee representing or advocating the position of any particular company or industry. We are not receiving remuneration from anyone for our testimony, and the views expressed in our testimony are our own and not necessarily those of any company or group that we currently represent or have represented.

In addition, we are not here to recommend any particular course of action by this Committee or Congress. We have been asked to offer our views as practicing attorneys on issues pertaining to the U.S. Environmental Protection Agency's (EPA) approach to addressing GHGs in the wake of the Supreme Court's decision in *Massachusetts v. EPA*.¹ In particular, we have been asked to comment on EPA Region 8's recent decision not to require Best Available Control Technology (BACT) for carbon dioxide (CO₂) emissions in its Prevention of Significant Deterioration (PSD) permit for the proposed Bonanza electric generating unit in Utah.² We believe EPA's Bonanza decision was appropriate. EPA Region 8 correctly held that BACT may

¹ 127 S. Ct. 1438 (2007).

² *Final Air Pollution Control Prevention of Significant Deterioration (PSD) Permit to Construct*, Permit No. PSD-OU-0002-04.00 (Aug. 30, 2007).

not be required for CO₂ because CO₂ is not currently subject to emission limitation or control requirements under the Clean Air Act.

Those who criticize the Bonanza decision take the position that GHGs, including CO₂, are regulated pollutants under the CAA at the present time, even before EPA acts on remand of the *Massachusetts* decision. As a result, they state that EPA, right now, under the PSD provisions of the CAA and its regulations, must establish BACT CO₂ limits in PSD permits.

The Committee should be aware of the implications of this position because it would create a huge and unprecedented burden for business activity across the economy and not just for new electric generators using coal. As explained in more detail below, if CO₂ is deemed to be a regulated CAA pollutant, no new “major” stationary source of CO₂ emissions *of any kind* can be built without first obtaining a PSD permit and complying with CO₂ BACT requirements.

Under the CAA, a “major” source is defined as either a source in one of twenty-eight listed categories that emits at least 100 tons per year (tpy) of an air pollutant or a source in an unlisted category that emits at least 250 tpy of an air pollutant.³ While 100/250 tpy may be appropriate as a threshold for PSD regulation of traditional air pollutants, it is a minuscule amount of CO₂. Buildings the size of the one we are in now, exceeding about 100,000 square feet, if they are heated by a furnace using fossil fuel (including oil or natural gas), likely produce CO₂ emissions in excess of 250 tpy. A very large number and variety of buildings and facilities exceed this threshold – including many office and apartment buildings; hotels; enclosed malls; large retail stores and warehouses; colleges, hospitals and large assisted living facilities;⁴ large houses of worship; product pipelines; food processing facilities; large heated agricultural

³ 42 U.S.C. § 7479(1).

⁴ States may exempt non-profit health or education institutions from the PSD program. Absent such exemption, even non-profit hospitals, nursing homes, assisted living facilities and school buildings of more than about 100,000 square feet would be subject to PSD regulation if CO₂ is deemed to be a regulated CAA pollutant.

facilities; indoor sports arenas and other large public assembly buildings; and many others. None of these types of sources has ever been subject to PSD permitting requirements before because they emit so little of the traditional air pollutants; but, they would be now if CO₂ is deemed to be a regulated CAA pollutant.

The PSD implications of CO₂ being a regulated CAA pollutant are not limited to new sources. Regulation of CO₂ under the CAA means that existing “major” CO₂ sources – emitting above the 100/250 tpy threshold – could not undertake any modification that would increase their CO₂ emissions by any amount without first undergoing PSD permitting, including BACT.⁵

PSD permitting is an incredibly costly, time-consuming and burdensome process. The Bonanza unit took more than three years to permit at a likely cost of millions of dollars. If CO₂ were deemed to be a regulated CAA pollutant now, then just the administrative burden alone – putting aside any BACT or other requirements that would result from the permitting process – would create an overwhelming and unprecedented roadblock to new investment for a host of previously unregulated buildings and facilities. Because these buildings and facilities are such relatively small CO₂ emitters, all of this economic pain would be created for very little environmental gain.

EPA is aware of the PSD implications of a decision by the Agency to regulate GHGs under the CAA in response to the *Massachusetts* case and is understood to be examining possible regulatory mechanisms to address whether small CO₂ emitters should be subject to PSD requirements if the Agency decides to regulate GHGs. Designing an appropriate mechanism will be difficult enough under EPA’s current timeline for responding to the *Massachusetts* case. Whatever mechanism EPA develops will be controversial because of the complex legal issues involved and because the mechanism will decide which CO₂ sources will be subject to PSD

⁵ 40 C.F.R. § 52.21(b)(2); 40 C.F.R. § 52.21(b)(23)(ii).

regulation and which will not. Moreover, that EPA regulatory mechanism will not be self-executing in most states – states first will have to adopt the mechanism in their State Implementation Plans (SIPs), and those SIP revisions will then have to be approved by EPA, a process that could take years.

But if, as some parties demand, CO₂ is declared to be, *right now*, a regulated CAA pollutant, then, without warning, a host of relatively small emitters will be immediately thrown into the PSD program. Just the uncertainties that would ensue as to what kind of facilities could be built or modified across the economy would be staggering. Anyone currently planning to build or modify a moderately sized or larger new building or facility which is heated with fossil fuels would have to delay the start of that project, perhaps for several years, while the PSD-permitting process is completed. The result could be an economic train wreck.

PSD BACKGROUND

Some basic background on the PSD program may be helpful before discussing the Bonanza case and its implications. The PSD program was adopted by Congress in 1977 and applies in all areas of the country where existing ambient air quality is better than the National Ambient Air Quality Standards (NAAQS). Although the NAAQS sets a maximum allowable level of a pollutant in the ambient air, Congress decided that in existing clean air areas the air should stay cleaner than the NAAQS, i.e., that the program must prevent significant deterioration of air quality.⁶

Under the PSD program, permits must be obtained before construction may begin on “major” new stationary sources of air pollutants.⁷ The CAA lists 28 specific types of stationary sources, such as power plants, refineries, steel mills, chemical plants, etc., that are “major,” and

⁶ See generally Clean Air Act, Title I, Part C, Subpart I, 42 U.S.C. §§ 7470-7479.

⁷ 42 U.S.C. § 7475(a).

subject to the PSD program, if they can emit at least 100 tons per year (tpy) of any air pollutant.⁸ Other, unlisted types of sources do not trigger PSD permitting as “major” sources unless they can emit at least 250 tpy of any air pollutant.⁹

Also, once a facility is “major,” a change to that facility is subject to preconstruction PSD permitting if the change causes a “significant” emissions increase. EPA’s regulations numerically define a “significant” emission increase for a number of pollutants. For instance, an increase of particulate matter emissions of 25 tpy, or of sulfur dioxide or nitrogen oxides emissions of 40 tpy, is considered a “significant” increase. For pollutants for which EPA has not provided a numerical “significance” definition, such as CO₂, *any* emission increase is considered to be a “significant” increase.¹⁰

For a “major” source, the CAA requires BACT for each pollutant which is “subject to regulation” under the Act.¹¹ BACT is determined on a case-by-case basis as the maximum emission reduction achievable, taking into account energy, environmental, and economic impacts and other costs.¹²

The PSD program is largely implemented through a state-administered permitting system. Seven states administer the program through “delegated” authority from EPA; they essentially act as EPA’s agent in administering EPA’s PSD permit requirements. On the other hand, forty-three states administer their own PSD programs, for which EPA regulations prescribe the minimum CAA requirements. These states must first promulgate their own revised PSD regulations in their SIPs. Those revised SIPs must then be submitted to EPA for approval. In a few instances, including the Bonanza permit, EPA itself directly administers the PSD permit

⁸ 42 U.S.C. § 7479(1).

⁹ Id.

¹⁰ 40 C.F.R. §§ 52.21(b)(1)(ii), 52.21(b)(2), 52.21(b)(23).

¹¹ 42 U.S.C. § 7475(a)(4).

¹² 42 U.S.C. § 7479(3).

system. The Bonanza permit was issued by EPA Region 8 because the proposed facility would be located in Indian Country and the affected Tribes do not have their own EPA-approved PSD programs. Challenges to PSD permits issued by either EPA or the seven states operating under delegated authority must first go to the EPA Environmental Appeals Board (EAB) before they go to court.¹³ The EAB has no jurisdiction over PSD permits issued by the other forth-three states.

THE BONANZA PERMIT

The Bonanza PSD permit was issued for a 110 megawatt (MW) electric generating unit at the existing Bonanza Power Plant located on the Uintah and Ouray Indian Reservations in Utah. The permit was issued to Deseret Power Electric Cooperative, a member-owned rural electric generation and transmission cooperative providing electric service to rural Utah. Steam from the new unit will be produced by burning waste coal in a circulating fluidized bed boiler, a technology classified as “clean coal” by the U.S. Department of Energy. Reflecting the time-consuming nature of the PSD permit process, the permit application was submitted on April 14, 2004, and the permit was not issued until August 30, 2007.¹⁴ On October 1, 2007, the Sierra Club filed an appeal of the permit to the EAB.¹⁵

The key issue asserted by the Sierra Club on appeal is that the Bonanza PSD permit did not but should have required BACT for CO₂ emissions from the new electric generating unit . In the Sierra Club’s view, CO₂ is presently “subject to regulation” under the CAA. The Sierra Club cites the *Massachusetts* decision as confirming that CO₂ is a CAA air pollutant.¹⁶ Interestingly, however, in light of the implication of today’s hearing that the *Massachusetts* case changed the regulatory landscape for consideration of CO₂ in PSD permit proceedings, the Sierra Club does

¹³ 40 C.F.R. § 124.19.

¹⁴ See *Final Air Pollution Control Prevention of Significant Deterioration (PSD) Permit to Construct*, Permit No. PSD-OU-0002-04.00 (Aug. 30, 2007).

¹⁵ See Petition for Review and Request for Oral Argument, PSD Appeal No. 07-03.

¹⁶ See Sierra Club Appeal at 4.

not principally rely on *Massachusetts* in its Bonanza appeal. The Sierra Club's primary argument to the EAB is that CO₂ is "subject to regulation" because Title IV acid rain sources (electric generating units) are required to monitor and report their CO₂ emissions allegedly under Section 821(a) of the 1990 CAA Amendments.¹⁷

The same issue is currently on appeal before the EAB in *In re Christian County Generation, LLC*, PSD Appeal No. 07-01. In the *Christian County* case, the Illinois Environmental Protection Agency (IEPA) issued a PSD permit to Christian County Generation, LLC for two 330 MW coal-based integrated gasification combined cycle (IGCC) facilities at the Taylorville Energy Center. Like the CFB technology used in the Bonanza project, IGCC is considered by U.S. DOE to be a clean coal technology. The Sierra Club appealed the PSD permit to the EAB on July 7, 2007.¹⁸ Briefing in the case has been completed, and oral argument was held on October 17, 2007. On September 24, 2007, the EPA Office of Air and Radiation (OAR) filed a brief defending IEPA's treatment of CO₂ emissions in the PSD permit, including IEPA's decision that BACT for CO₂ was not required, as consistent with the CAA, EPA's PSD regulations and EPA policy.

THE BONANZA PERMIT WAS CORRECTLY DECIDED

For the reasons set forth in Region 8's Bonanza decision and in EPA OAR's brief and oral argument in the *Christian County* case, EPA has correctly determined not to treat CO₂ as "subject to regulation" under the CAA at this time and, therefore, not to require BACT for CO₂.

As an initial matter, since today's hearing is focused on the *Massachusetts* case, it is important to highlight what the Supreme Court did and did not rule as to GHGs. The Supreme Court ruled only that GHGs are CAA air pollutants and that EPA must regulate GHG emissions

¹⁷ 42 U.S.C. § 7651k note; Pub. L. No. 101-549; 104 Stat. 2699.

¹⁸ Illinois is one of the seven states administering EPA's permit program under "delegated" authority; accordingly, appeals from the IEPA go first to the EAB.

from new motor vehicles under Section 202 of the CAA, *but only if* EPA first finds that such emissions may reasonably be anticipated to endanger public health or welfare. In its response to *Massachusetts*, EPA could make this endangerment finding and promulgate new motor vehicle GHG regulations; it could find that new motor vehicle GHG emissions cannot reasonably be anticipated to endanger public health and welfare and on that basis decline to issue GHG regulations; or it could provide a reasonable explanation for why it cannot or will not make an endangerment finding and thereby decline to issue GHG regulations. If EPA makes the endangerment finding for CO₂ and promulgates new motor vehicle GHG regulations, CO₂ will then be “subject to regulation” under the CAA, and PSD permits will be required to consider BACT for CO₂ emissions. Unless and until EPA promulgates CO₂ regulations, however, CO₂ is not “subject to regulation” under the CAA, and BACT cannot be required for CO₂ in PSD permits.

A semantic argument that CO₂ is presently “subject to regulation” even though it is not actually regulated – on the theory that it *could* be regulated given *Massachusetts* – would make little sense. *Massachusetts* found that CO₂ is a CAA air pollutant based on the Court’s finding that the CAA terms “air pollutant” and “air pollution” are extremely broad. Virtually any substance emitted to the air is an air pollutant as the Supreme Court construed that term. As the Court found, however, an air pollutant cannot be regulated under the CAA unless EPA first determines that it may reasonably be anticipated to endanger public health or welfare. Thus, the argument that a substance is “subject to regulation” just because it is a CAA air pollutant, and before EPA actually regulates that substance owing to its health or welfare effects, would mean that EPA must set BACT limits for substances that have not been found to pose harm to the public. EPA quite logically has never interpreted the PSD program in that manner.

Indeed, in defining emissions that are “subject to regulation” for purposes of PSD, EPA’s regulations list three specific programs under which a pollutant could be “subject to regulation” (NAAQS, NSPS, stratospheric ozone) and then list a fourth catch-all category for “other” CAA programs.¹⁹ EPA would have had no purpose for creating this list of CAA regulatory programs if any air pollutant, whether or not actually regulated, is “subject to regulation.” EPA could much more easily have stated that any substance emitted by the PSD source is subject to BACT controls.

As stated, the Sierra Club argues in the Bonanza appeal that CO₂ at the current time is actually – and not just potentially – regulated because, under Section 821 of the 1990 CAA Amendments, Title IV sources must monitor and report their CO₂ emissions. However, that argument fails to recognize that Section 821 *of the 1990 statute* did not actually amend the Act. When Congress passed Pub.L. 101-549 to amend the CAA, some of the statute’s provisions were expressly identified as amendments to the Act while other statutory provisions, including Section 821, were not. Thereafter, when the 1990 Amendments were codified as part of the CAA, Section 821 of the statute appeared only as a note to Section 412 of the Amendments²⁰ rather than as part of any amendment to the Act. Consequently, contrary to the Sierra Club’s assertion, CO₂ cannot constitute an air pollutant subject to regulation “under the Act” because Section 821 of Pub.L. 101-549 has never been part of the Act itself.

Furthermore, the Sierra Club seems to be arguing that, for purposes of PSD requirements, Section 821 of the statute has been unnoticed, hiding in plain sight as part of the Act, for nearly two decades (across two Administrations) of intense debate about GHG regulatory policy until the Sierra Club just recently discovered it as a mandate for CO₂ BACT within the last year. That

¹⁹ 40 C.F.R. § 52.21(b)(50).

²⁰ 42 U.S.C. § 7651k.

argument makes little sense. The more likely explanation for the fact that Section 821 of the 1990 statute has never before been argued as mandating BACT for CO₂ in PSD permits is that the argument is far-fetched.

In fact, as OAR noted in its *Christian County* brief, the EPA Administrator determined more than twenty years ago that EPA “lacks the authority to impose [PSD permit] limitations or other restrictions directly on the emission of unregulated pollutants.”²¹ Consistent with this principle, the EAB (which is independent of and does not report to the EPA Administrator) has twice held since the 1990 CAA Amendments that CO₂ is an unregulated pollutant for PSD permitting purposes.²² EPA’s *Christian County* brief also correctly noted that the EAB has ruled that, for PSD purposes, “subject to regulation” means subject to emission limitations or controls.²³ Thus, even if Section 821 of Pub. L. 101-549 had actually amended the CAA, the fact that Title IV sources must monitor and report CO₂ emissions as a result of that provision does not make CO₂ a regulated pollutant for PSD purposes.

In sum, EPA’s position in the Bonanza and Christian County cases does not reflect a policy determination after *Massachusetts* to avoid GHG regulation. To the contrary, EPA’s determination in the Bonanza case not to include BACT limits for CO₂ is well-grounded in law, Agency regulation and its policy stretching back to the previous Administration and confirmed by decisions of EPA’s independent EAB.

²¹ *North County Resource Recovery Assoc.*, 2 E.A.D. 229, 230 (EAB 1986).

²² *Kawaihae Cogeneration Project*, 7 E.A.D. 107, 132 (EAB 1997); *Inter-power of New York*, 5 E.A.D 130, 151 (EAB 1994).

²³ See *Kawaihae Cogeneration Project*, 7 E.A.D. at 132 (CO₂ is not “a regulated air pollutant for permitting purposes” because there were “no regulations or standards prohibiting, limiting or controlling the emissions of greenhouse gases from stationary sources”). See also *Knauf Fiber Glass*, 8 E.A.D. 121, 163-64 (EAB 1999) (“additional [PSD] permit conditions relating to emissions of respirable glass fibers” were not mandated because those fibers are “unregulated pollutants” not subject to actual direct CAA regulation).

IMPLICATIONS OF RULING THAT CO₂ PRESENTLY IS “SUBJECT TO REGULATION” UNDER THE CAA

Although the Bonanza and Christian County permits were for new electric generating units using coal, the implication of a decision that CO₂ is presently “subject to regulation” under the CAA goes much further. The PSD regulations, of course, are not just limited to electric generating units; they extend to any new stationary source that is deemed to be a “major” source of regulated emissions.

As discussed above, the term “major” stationary source is defined to include twenty-eight listed categories of sources that have a potential to emit at least 100 tpy of any air pollutant that is subject to CAA regulation. It also includes any other types of stationary sources that have a potential to emit at least 250 tpy of any air pollutant subject to CAA regulation. The term “stationary source” is very broad. It includes “any building, structure, facility or installation” which emits or may emit a regulated pollutant.²⁴ Thus, if any new sources emit at least 100/250 tpy of CO₂, and if CO₂ is considered to be subject to CAA regulation, then these sources would be subject to PSD permitting requirements.

The 100/250 tpy threshold for PSD applicability was set based on emission levels of traditional pollutants, such as particulate matter, nitrogen oxides and sulfur dioxide. Emissions above this threshold were considered to be significant enough to trigger a need to regulate these pollutants. The PSD-triggering threshold was not set based on the premise that 100/250 tpy is a significant enough level of CO₂ emissions to justify regulation. CO₂ is not like traditional pollutants for a number of reasons, one of which is that 100 or 250 tpy is not a great deal of CO₂. Although the 100/250 tpy level for traditional pollutants generally limits PSD permit requirements to large stationary sources like coal-fired electric generators, chemical plants,

²⁴ 40 C.F.R. § 52.21(b)(6).

refineries and the like, a 100/250 tpy threshold for CO₂ will subject a massive number of small facilities to PSD requirements.

The PSD burden caused by a 100/250 tpy applicability threshold for CO₂ could be overwhelming for small and large businesses alike. New sources emitting more than 100/250 tpy of CO₂ could not be built without first obtaining a PSD permit after undergoing the BACT process. Existing sources that emit more than 100/250 tpy of CO₂ that wish to expand or modify their facilities in a way that would increase CO₂ emissions by *any* amount would likewise first have to obtain a PSD permit after undergoing the BACT process. As shown by the Bonanza case, for example, the PSD process can take years and cost millions of dollars. No small business requiring a moderate-sized building or facility heated with fossil fuel could operate subject to the PSD permit administrative burden.

The requirement that sources emitting more than 100/250 tpy of CO₂ apply BACT also injects considerable, and perhaps fatal, uncertainty for businesses. No one can say at this time what BACT is for CO₂ because there is no precedent or guidance. BACT is determined through a case-by-case evaluation of control technology alternatives and involves a complicated weighing of economic, environmental, energy and other factors. BACT can even be no control measure if that weighing process fails to identify a technically and economically feasible technology for controlling the pollutant in question. But since BACT determinations for CO₂ have no regulatory history at this time, and can vary by type of facility and from state-to-state, businesses wishing to construct new sources or modify existing ones would have no basis for planning what the regulatory requirements will be.

EPA recognizes this potentially catastrophic PSD implication for small sources if and when it adopts GHG regulations in response to *Massachusetts*. It may be considering ways to

prevent very small sources of GHG emissions from becoming subject to PSD as a result of whatever motor vehicle CO₂ regulations the Agency adopts. Trade press has speculated on several possible alternatives, all of which pose legal issues. We are not aware at this time of anything official from the Agency.

Obviously, the nature of any mechanism EPA may propose to prevent application of the PSD program to very small sources of CO₂ emissions is critical for a broad range of businesses. The mechanism will establish a dividing line defining which sources will become subject to PSD permitting and which will not. EPA needs sufficient time to carefully consider the basis and effect of whatever mechanism it adopts. EPA must establish this dividing line through notice and comment rulemaking so the public has an opportunity to provide input on this very important issue. Unfortunately, if EPA ultimately adopts a mechanism limiting the effect on small sources of a decision to regulate GHGs, that mechanism will not be immediately effective in most states. As previously discussed, seven states essentially act as EPA's agents in administering the PSD program, and the mechanism EPA adopts will immediately become effective in these states. However, the forty-three states that independently administer their own PSD programs under EPA supervision must undertake their own rulemakings to adopt EPA's mechanism or possibly a more stringent mechanism (one that subjects a broader range of CO₂ stationary sources to PSD regulation) in their SIP. A regulatory gap will therefore exist for sources in these states, after EPA has adopted its new mechanism. In these states, until the state also adopts a mechanism in its SIP and the state's SIP revision is approved by EPA, sources will continue to be subject to the state's current PSD regulations. As a result, new sources which emit above the 100/250 tpy CO₂ threshold (and which are therefore "major"), and existing "major" sources undergoing modifications that cause any increase in CO₂ emissions, will need

PSD permits. This will obviously be a potentially disastrous situation for the many sources that emit relatively token amounts of CO₂.

As can be seen, the effect of actual EPA regulation of GHGs creates very important issues for a multitude of small sources, and these issues will be difficult enough to solve even under EPA's current schedule for responding to *Massachusetts*. If, on the other hand, as some demand, CO₂ is determined to be "subject to regulation" under the CAA *now*, the result could be catastrophic. The impact on the American economy would not be favorable, to say the least.

CONCLUSION

EPA correctly decided the Bonanza case. GHGs, including CO₂, are not presently subject to CAA regulation. Therefore, BACT for CO₂ in PSD permits is not authorized by the CAA. The implication of the contrary position should be considered more closely given the huge potential impact on American businesses across the economy. We appreciate the opportunity to submit this testimony.